

**REMARKS**

This Amendment is responsive to the prematurely *Final Office Action* of June 9, 2008. Reconsideration and allowance of claims 1, 7, 8, 10, 11, and 17-23 are requested.

**The Office Action**

Claims 1-22 now stand rejected under 35 U.S.C. § 103 as being unpatentable over Teller (US 2002/0019586, also known as US 7,261,690), in view of Knispel (US 4,883,067).

Claim 23 stands rejected under 35 U.S.C. § 103 as being unpatentable over Teller in view of Knispel, further yet in view of Sylliassen (US 2002/0134474).

**The Finality of the June 9, 2008 Office Action is Premature**

In the preceding Amendment, claim 19, which had been rejected under a combination of four references, was placed in independent form including the subject matter of its parent claims 8 and 18. Because a dependent claim is read as including all of the subject matter of its parent claims, merely placing a dependent claim in independent form including the subject matter of its parent claims does not change its scope. Because the amendment to claim 19 did not change its scope, the preceding Amendment did not necessitate the new ground of rejection. It is submitted that the new ground of rejection was not necessitated by the applicant placing claim 19 in independent form, but was rather necessitated by the Examiner's failure to cite the Teller or Knispel references earlier in the prosecution.

Accordingly, the *finality* of the June 9, 2008 Office Action is premature and must be withdrawn.

**The Present Amendment Should Be Entered**

First, as set forth above, the *finality* of the June 9, 2008 Office Action is premature.

Second, in the March 2008 Amendment, the applicant copied large portions of claims 8 and 18 into claim 19 in their exact form (including grammatical errors) in order to emphasize that the scope of claim 19 was not being changed and to

reduce the potential for the Examiner erroneously making a rejection against claim 19 based on new references *final*. The present amendment proposes to cure these grammatical errors in claim 19 and additional grammatical errors in claim 8. Specifically, the present amendment proposes to match various verbs with their subject and to use the correct infinitive form of “to reduce”.

Because the present amendment only addresses grammatical corrections and does not change the scope of the claims, it is submitted that this amendment should be entered.

**The References of Record**

**Teller** is directed to a system for monitoring the health, wellness, and fitness of a patient or subject. It remotely collects data relating to an individual’s physiological state, lifestyle, and various contextual parameters. The collected data is stored and made available for analysis.

**Knispel** is directed to a method and apparatus for psychoacoustically inducing and controlling a wide variety of psychological and physiological states of a patient. More specifically, biofeedback is generated and used to control music supplied to the patient to control his/her psychological and physiological states.

**The Claims Distinguish Patentably  
Over the References of Record**

**Claim 1** calls for a method of controlling an electronic device. By contrast, Teller is directed to a method for gathering physiological information about a subject. Knispel is directed to a method of controlling a psychological or physiological state of a subject.

Claim 1 further calls for reducing an output of the controlled electronic device in response to detecting theta waves from the user. More specifically, claim 1 calls for reducing at least one a volume of sound output by the electronic device, a quality of sound output by the electronic device, a size of an image output by the electronic device, and a quality of image output by the electronic device in response to detecting theta waves. Although Teller detects brainwaves, Teller makes no suggestion that theta waves should be used to trigger a control event in a controlled electronic device. Knispel fails to cure this shortcoming of Teller. Knispel, at

column 1, lines 24-39, referenced by the Examiner, merely points out the frequency ranges within which alpha, beta, and theta waves lie, and indicates that theta waves are often associated with pre-sleep, dreamlike meditations, and visual imagery. Like Teller, Knispel makes no suggestion that theta waves should be used to reduce a volume, sound quality, image size, or image quality of a controlled electronic device.

Claim 1 further calls for switching the electronic device to one of OFF and hibernation mode in response to detecting delta waves or a REM state. Please note that claim 1 calls for one action to be taken (reducing the volume, sound quality, image size, or image quality) in response to detecting theta waves and a different response (switching the device OFF or to a hibernation mode) in response to detecting delta waves or a REM state. In paragraph [0114] of Teller, referenced by the Examiner, Teller makes a passing suggestion that a television or stereo might be turned OFF when the wearer is “determined to have fallen asleep”. This paragraph makes no suggestion of a reducing control function in response to theta waves, and an OFF or hibernation control function in response to delta waves or a REM state. Knispel fails to cure this shortcoming of Teller. Knispel, at column 1, lines 24-39, referenced by the Examiner, merely denotes the existence and significance of various brainwaves and makes no suggestion that different control functions should be undertaken in response to different brainwaves, much less that a reducing function should be performed in response to detecting theta waves and an OFF or hibernation control function should be performed in response to detecting delta waves or a REM state.

Further, it is submitted that the Examiner’s discussion and conclusion in the last paragraph on page 3 of the Office Action is a classic case of hindsight reconstruction. The Examiner’s discussion of how and why it would be “obvious” to modify the references, it is submitted, is supported and motivated only by the present application and is neither supported nor motivated by either Teller, or Knispel, or any combination thereof.

Because neither Teller, Knispel, nor the combination thereof, teach or fairly suggest the combination of starting a reducing mode in response to brainwaves of one type, and turning the device OFF or to a hibernation mode in response to other brainwaves and for the other reasons set forth above, it is submitted that **claim 1 and**

**claims 7, 17, and 23 dependent therefrom** distinguish patentably and unobviously over the references of record.

**Claim 8** is directed to an electronic device which includes a control unit that determines whether the user is asleep, probably asleep, or awake. The central monitoring unit **30** of Teller not only is at a remote location, but Teller also fails to suggest that it can or should determine whether the user is asleep, probably asleep, or awake. Teller merely mentions in passing that a television or stereo can be turned OFF if the user is asleep, but makes no suggestion of determining whether the user is asleep or only probably asleep. Knispel, which only describes the relative conscious state of a subject when different types of brainwaves are detected, does not address or cure this shortcoming of Teller.

Moreover, claim 8 calls for one control function to be initiated in response to determining that the user is asleep and a different control function to be initiated in response to determining that the user is probably asleep. Teller not only makes no determination of whether the patient is asleep or probably asleep, but further fails to make any suggestion of initiating different control functions in response to the user being asleep versus when the user is only probably asleep. Knispel neither has a control unit that determines whether a user is asleep or probably asleep, nor has a control unit which undertakes different control functions in response to determining that a patient is asleep versus that the user is probably asleep.

Further, claim 8 calls for controlling the electronic device to at least one of reduce a volume, sound quality, image size, or image quality in response to determining that the user is probably asleep and switching the electronic device to a reduced power consumption load in response to determining that the user is asleep. Although Teller suggests in passing that a television or stereo could be turned OFF if the user is asleep, it makes no suggestion of any reduced volume, reduced sound quality, reduced image size, or reduced image quality mode which should be initiated under any conditions, much less in response to a determination that the user is probably asleep. Knispel, which neither determines whether a user is probably asleep, nor controls the electronic device in response to determining that a user is probably asleep, nor suggests a reduced sound volume, reduced sound quality, reduced image size, or reduced image quality mode, fails to cure these shortcomings of Teller.

Further, the Examiner somehow combines the health, wellness, and fitness monitoring system of Teller with the biofeedback device of Knispel to come up with an electronic device that has a control unit that switches itself OFF when it determines that the user is asleep or controls itself to reduce one of its sound quality image size, or image quality in response to determining that a user is probably asleep. It is submitted that the combining of two references which work in different ways to achieve materially different functions in an effort to derive a third apparatus which functions in a materially different way from either in order to achieve a materially different end result is evidence that the Examiner's rejection is based on a hindsight reconstruction and not teachings or motivation provided by the applied references.

Accordingly, it is submitted that **claim 8 and claims 10, 11, 18, and 22 dependent therefrom** distinguish patentably and unobviously over the references of record.

Dependent **claim 22** calls for a pressure sensor for generating the detection signal upon which the determination of whether the user is asleep, probably asleep, or awake is also based. Although Teller discloses a blood pressure cuff, there is no indication or suggestion in Teller that the output of the blood pressure cuff could or should be used as a basis for determining whether a user is asleep, probably asleep, or awake. Knispel fails to address or cure this shortcoming of Teller. For this additional reason, it is submitted that **claim 22** distinguishes yet more forcefully over the references of record.

**Claim 19** calls for an electronic device that includes a control unit that determines whether a user is probably asleep by identifying from a detection signal a first brainwave pattern that is indicative of at least one of relaxed with eyes closed, sleepy, already sleeping, or in a sleep transition. Teller makes no suggestion of any control unit which makes such a determination. Knispel also fails to disclose a control unit which makes any such determination.

Claim 19 further calls for the control unit to determine whether the user is asleep by identifying a second brainwave pattern indicative of the user being in a deep sleep or a REM sleep. Neither Teller, nor Knispel teach or fairly disclose a control unit that determines whether a user is probably asleep by identifying a first

brainwave pattern, and whether a user is asleep by identifying a second brainwave pattern.

Moreover, claim 19 calls for the control unit to respond to the probably asleep and asleep determinations in two different ways. Neither Teller, nor Knispel teach or fairly suggest controlling an electronic device in two different ways based on whether a user is probably asleep versus asleep.

Accordingly, it is submitted that **claim 19 and claims 20 and 21 dependent therefrom** distinguish patentably and unobviously over the references of record.

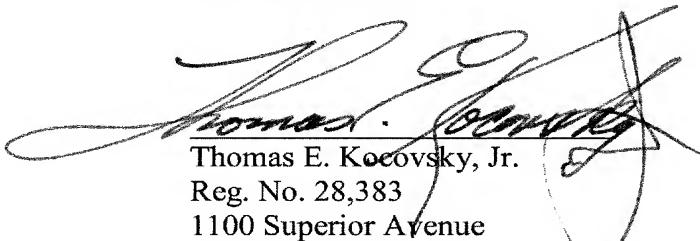
Dependent **claim 20** further calls for a motion detector and for the control unit to determine whether the user is probably asleep based on the brainwave detection signal and a motion detection signal. Teller does not disclose or fairly suggest determining whether a patient is probably asleep, much less making such a determination based on a combination of brainwaves and motion. Knispel fails to cure this shortcoming of Teller. Knispel merely indicates the significance of various brain patterns and makes no suggestion of determining whether a subject is probably asleep, much less determining whether the user is probably asleep based on a combination of brainwaves and motion detection. Accordingly, it is submitted that **claim 20** distinguishes yet more forcefully over the references of record.

**CONCLUSION**

For the reasons set forth above, it is submitted that claims 1, 7, 8, 10, 11, and 17-23 are now in condition for allowance. An early allowance of all claims is requested.

Respectfully submitted,

FAY SHARPE LLP



Thomas E. Koeovsky, Jr.  
Reg. No. 28,383  
1100 Superior Avenue  
Seventh Floor  
Cleveland, OH 44114-2579  
(216) 861-5582

**Direct All Correspondence to:**

Eric Bram, Reg. No. 37,285  
US PHILIPS CORPORATION  
P.O. Box 3001  
Briarcliff Manor, NY 10510-8001  
(914) 333-9635 (tel)  
(914) 332-0615 (fax)